

### **In the Claims**

Please amend page 14, line 1 as follows:

### **Claims What is claimed is:**

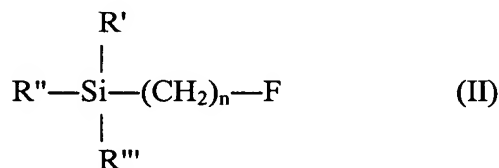
This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Original) A process for preparation of a fluorohaloalkane of formula (I)

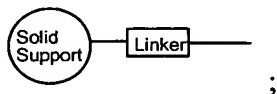


wherein X is halo and n is an integer of from 1 to 6; which comprises:  
reaction of the corresponding organosilicon compound of formula (II):

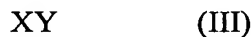


wherein n is as defined for the compound of formula (I); and

R', R'', and R''' are independently selected from C<sub>1-6</sub> alkyl and C<sub>1-6</sub> haloalkyl; and  
R'' may alternatively be the group:

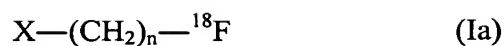


with a compound of formula (III):

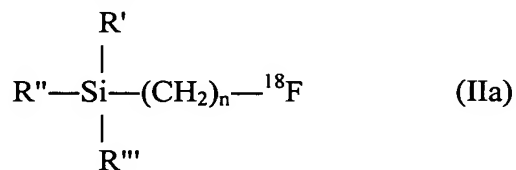


wherein X is as defined for the compound of formula (I) and Y is halo.

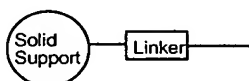
2. (Original) A process according to claim 1 for preparation of a [<sup>18</sup>F]fluorohaloalkane of formula (Ia)



wherein X is halo and n is an integer of from 1 to 6; which comprises:  
reaction of the corresponding organosilicon compound of formula (IIa):



wherein n is as defined for the compound of formula (Ia); and  
R', R'', and R''' are independently selected from C<sub>1-6</sub> alkyl and C<sub>1-6</sub> haloalkyl; and  
R'' may alternatively be the group:



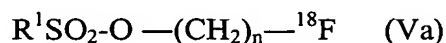
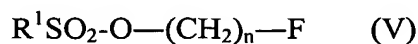
with a compound of formula (III):



wherein X is as defined for the compound of formula (Ia) and Y is halo.

3. (Currently amended) A process according to claim 1 or 2 which comprises the further step:

- (i) isolation of the compound of formula (I) or (Ia); and/or
- (ii) conversion of the compound of formula (I) or (Ia) to a corresponding fluoroalkylsulphonyl ester of formula (V) or (Va) respectively:



wherein n is as defined for the compound of formula (I) or (Ia), and R<sup>1</sup> is selected from C<sub>1-6</sub> alkyl, C<sub>1-6</sub> perfluoroalkyl, aryl, tolyl, perfluoroaryl, and perfluorotolyl.

4. (Currently amended) A process according to ~~any one of claims 1 to 3~~ claim 1 which comprises the further step:

(i) use of the resulting compound of formula (I) or (Ia) in the preparation of a fluoroalkyl ligand or radiotracer, such as a [ $^{18}\text{F}$ ]fluoroalkylated radioligand or [ $^{18}\text{F}$ ]-radiotracer.

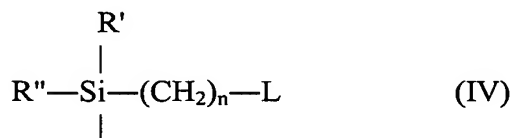
5. (Original) A process according to claim 4 wherein the radioligand or radiotracer prepared is selected from:

2-(1,1-dicyanopropen-2-yl)-6-(2-[ $^{18}\text{F}$ ]-fluoroC<sub>1-6</sub>alkyl)-methylamino)naphthalene,  
3-(2'-[ $^{18}\text{F}$ ]fluoroC<sub>1-6</sub>alkyl)sipiperone,  
[ $^{18}\text{F}$ ][2-fluoroC<sub>1-6</sub>alkoxy-5-(5-trifluoromethyl-tetrazol-1-yl)-benzyl]-([2S,3S]-2-phenyl-piperidin-3-yl)-amine,  
2-beta-carbomethoxy-3-beta-(4-iodophenyl)-8-(3-[ $^{18}\text{F}$ ]fluoroC<sub>1-6</sub>alkyl)-nortropane,  
[ $^{18}\text{F}$ ]fluoroC<sub>1-6</sub>alkylflumazenil, and  
[ $^{18}\text{F}$ ]fluoroC<sub>1-6</sub>alkyl-choline.

6. (Currently amended) A process according to claim 4 ~~or 5~~ wherein the [ $^{18}\text{F}$ ]fluoroalkylated radioligand prepared is selected from:

2-(1,1-dicyanopropen-2-yl)-6-(2-[ $^{18}\text{F}$ ]-fluoroethyl)-methylamino)naphthalene,  
3-(2'-[ $^{18}\text{F}$ ]fluoroethyl)sipiperone,  
[ $^{18}\text{F}$ ][2-fluoromethoxy-5-(5-trifluoromethyl-tetrazol-1-yl)-benzyl]-([2S,3S]-2-phenyl-piperidin-3-yl)-amine),  
2-beta-carbomethoxy-3-beta-(4-iodophenyl)-8-(3-[ $^{18}\text{F}$ ]fluoropropyl)-nortropane,  
[ $^{18}\text{F}$ ]fluoroethylflumazenil),  
[ $^{18}\text{F}$ ]fluoromethyl-choline, and  
[ $^{18}\text{F}$ ]fluoroethyl-choline).

7. (Currently amended) A process for the preparation of a compound of formula (II) or (IIa) as defined in claim 1 ~~or 2~~ which comprises reaction of a compound of formula (IV):

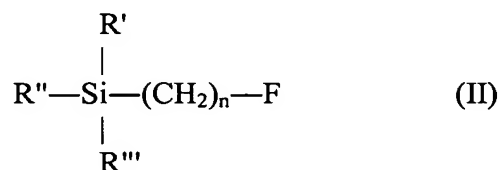


R'''

wherein n, R', R'', and R''' are as defined for the compound of formula (II) or (IIa), and L is a leaving group;

with a source of F<sup>-</sup>, preferably <sup>18</sup>F<sup>-</sup> in the presence of a phase transfer catalyst.

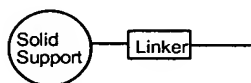
8. (Original) A compound of formula (II):



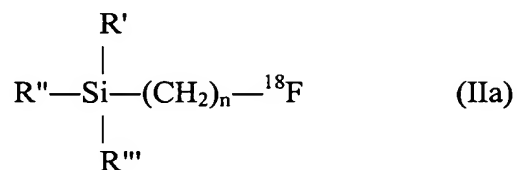
wherein n is an integer of from 1 to 6; and

R' and R''' are independently selected from C<sub>1-6</sub> alkyl and C<sub>1-6</sub> haloalkyl; and

R'' is the group:



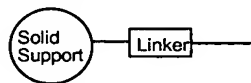
9. (Original) A compound of formula (IIa):



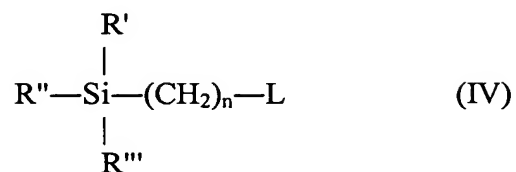
wherein n is an integer of from 1 to 6; and

R', R'', and R''' are independently selected from C<sub>1-6</sub> alkyl and C<sub>1-6</sub> haloalkyl; and

R'' may alternatively be the group:



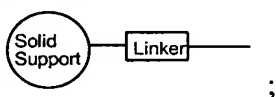
10. (Original) A compound of formula (IV):



wherein n is an integer of from 1 to 6;

R', R'', and R''' are independently selected from C<sub>1-6</sub> alkyl and C<sub>1-6</sub> haloalkyl; and

R''' may alternatively be the group:



L is a group -OSO<sub>2</sub>R<sup>2</sup> wherein R<sup>2</sup> is selected from C<sub>1-6</sub> alkyl, C<sub>1-6</sub> perfluoroalkyl, aryl, perfluoroaryl, tolyl, and perfluorotolyl;

provided that:

(a) when R''' is C<sub>1-6</sub> alkyl or C<sub>1-6</sub> haloalkyl, n is not 1; and

(b) when R''' is C<sub>1-6</sub> alkyl or C<sub>1-6</sub> haloalkyl and n is 2 to 6, L is not -OSO<sub>2</sub>CH<sub>3</sub> or -OSO<sub>2</sub>(*para*-methyl)phenyl.